

Science Board Meeting Report
January 30 - February 2, 2001
NOAA Center for Coastal Environmental Health and Biomolecular Research
Charleston, South Carolina

NOS/NMFS Retreat on Topics for Research Collaboration -

We reached agreement on the following:

Prior to their January 31 meeting, both the NMFS Science Board and the NOS/NCCOS Science Directors had reviewed and refined a list of topics where shared interest and expertise might provide a basis for collaborative research efforts. In their introductory remarks, the NOAA Fisheries and NOS Chief Scientists discussed how science is organized and coordinated in the two line offices and some principles of collaboration before moving into a discussion of potential joint efforts. From the list, a small number of areas for discussion were chosen. The next step was the identification of a small team for each topic with NOS and NMFS leads to prepare a paper focused on current capabilities and future funding needs for shared research. The research topics for collaboration and the lead individuals included:

HABs - a small team (K.Sellner, D.Detlor leads) will develop a short document that outlines the comprehensive HAB science need, the portion that is being covered by existing efforts, what is still needed, and recommendations or options on how to fill those gaps.

Fisheries Oceanography - a small team (E.Turner, E.Clark leads) will develop a short document that outlines the comprehensive Fisheries Oceanography science need, the portion that is being covered by existing efforts, what is still needed, and recommendations or options on how to fill those gaps.

Habitat Characterization - a small team (J.Thomas/S.Brown/S.Zimmerman) will develop a paper around the notion of “Developing and testing technologies for remotely sensing habitat”. This would include ship-board, submersible, aerial, and satellite remote sensing platforms; ground-truth and related analysis; data management/processing (including access to 3rd-party data); and consider habitats from coastal watersheds to the outer edge of the EEZ. This will NOT include land-cover analysis.

MPAs - a small team (S.Bolton/R.Kelty) will develop a paper around two key questions: 1) “What science is needed to design MPA’s to conserve biodiversity” and 2) “What science is needed to optimize the different goals of multiple MPA’s”. NOS is developing an Integrated Assessment related to West Coast MPAs and will work with NMFS on its development and implementation.

Forensics - a small team (S.Galloway/U.Varanasi/D.Jones/A.Merten/M.Tillman) will develop a paper on what is needed to expand research, development, and application of marine forensics and other genetic- and molecular-based technologies to serve an expanding internal and external client base.

Corals - no specific action at this time.

MSIs - At our next meeting, NMFS will brief NOS on their extensive efforts related to MSI's so NOS can benefit from their experience and look for ways to work with them on this important issue.

OLO - Habitat Report Update -

The SB reviewed the outline of the OLO - Habitat Report reported to be close to the final version by S. Brown (F/ST) and the status of the plans for the pilot studies. Members of the SB observed that the work associated with this report is a much larger undertaking than first envisioned and questions about whether the goals are too high for the level of data were expressed. It was noted that one of the end results of the OLO- Habitat Report will be to underscore that current habitat needs which are considerably underfunded and the large gap that exists between current efforts and regulatory requirements.

Web-Based OLO -

In an effort to continually press the envelope on accessibility to NMFS scientific information, A. Shimada (F/ST) presented to the SB a proposed process by which the biological OLO will be turned into a web-based document that will be continually updated as assessments are completed. The SB supported the concept of an on-line OLO and the following steps were agreed to: (1) any and all stock assessments are done in PDF format and posted to the website of the authoring NMFS Science Center; and (2) the OLO template for regional summary and regional updates will be developed by S&T, while regular updating of each regional summary will be the responsibility of each Science Center.

ACTION: Each Science Center was asked to identify their lead OLO contact and report to S&T by February 23. In addition, each Science Center will set up an external link that will be their site for posting annual updated stock assessments. The Office of S&T will develop the overall OLO website that contains the summary documents and links to each Centers' updated stock assessment.

Ireland - In 1995, the late U.S. Commerce Secretary, Ron Brown, signed an agreement with the Irish Minister for the Marine, Seán Barrett, committing NOAA and the Marine Institute of Ireland to the development of collaborative projects involving research, technology, sustainable development, protection, and management of marine and coastal resources. This agreement originated as a result of President Clinton's peace-making efforts in Northern Ireland, and provides a unique opportunity for the development of both east/west (Atlantic) and north/south (Ireland) co-operative marine research programs. Major activities are now under way in four areas: marine fisheries (egg and larval surveys, stock assessment, and oceanography), harmful algal blooms (predictive modeling, in situ sensors, phytoplankton biology, and toxin chemistry), salmon migration (marine survival, aquaculture governance, mitigating dam impacts, and estimating angling catches), and data management and oceanographic modeling in support of these activities.

From January 17 - 19, 2001, a Retrospective Analysis Study Workshop was held in Ireland with

participants from NOAA and the Marine Institute. Draft Work Plans for 2001 were reviewed for Ocean Data Management, Fisheries, Harmful Algal Events and Salmon Migration. The Workshop served as a review of on-going efforts and an opportunity for mid-course corrections. Both sides expressed satisfaction on the progress made to date and the future potential for collaborative research. The next meeting will be dictated by the needs of the individual projects.

Science Quality Assurance Program - In early December 2000, the NMFS Science Board received the questionnaire prepared by the Office of S&T (L.Clarke) to solicit the opinions of NMFS Science Center staff regarding science standards that should be used by NMFS. The questionnaire is part of the Science Board's efforts to develop a more formal Science Quality Assurance Program for NMFS. The results of the questionnaire are being compiled by the Office of S&T to establish a set of science standards that will be used in implementing a formal accreditation process for NMFS Science Centers.

ACTION: E.Clarke previewed the preliminary tally of information from the SQAP Questionnaire for the SB with a Power Point Presentation. She reported that a summary of the findings will be circulated as well as a grouping by type of response each item requires: (Opinion/Money/Process). The summary document of the questionnaires findings and corroborating spread sheet of raw data are to be forwarded to the Science Directors by February 16 and a draft set of science standards are to be circulated by February 28.

Center of Independent Experts -

The list of reviews to be undertaken by the Center of Independent Experts was discussed and the preliminary list includes:

SWC - Blue Marlin, Dolphin in ETP

AKC - Cool Inlet Beluga Whales, Pacific Cod

NWC - STAR Panel Participants, Cumulative Risk Assessment

NEC - SARC, Atlantic Herring Acoustics Research, Dogfish

SEC - Turtle Stock Assessment

HMS - Coastal Shark Settlement

There are also a number of CIE reviews that are nearing completion, including: Salmon Matrix and Red Snapper.

ACTION: The Office of Science & Technology will develop an RFP in order to contract for conducting the Center for Independent Experts and it will be put out for bid in the near future.

Discussions w/Office of Sustainable Fisheries Director, Clarence Pautzke

The Science Board hosted a 1/2 day session with the Director of the Office of Sustainable Fisheries and newly appointed Acting Deputy Assistant Administrator for Regulatory Programs, C. Pautzke. Mr. Pautzke came with a list of twelve items for discussion that relate to the nexus between science and management. The following summarizes the discussions and related action items:

a. National Standard #1 guidance - The Science Board agreed that the language "to the extent practicable" means that a proxy can be used for clarifying SPR and directed that a workshop be held to define the way that proxies can be used in data-poor situations. The Science Board

recommended that internal discussions take place on which technical approach is favored, followed by the workshop with both internal and external participants.

ACTION: (1) C.Pautzke will follow-up with the NOAA Fisheries Front Office to ensure that the report of the Tampa Workshop held in August 2000 is finalized that summarizes science issues related to National Standard #1 discussed among NOAA Fisheries and Council scientists. (2.) F/ST(P.Mace) will work in concert with F/SF to organize a workshop on data-poor methodologies to involve internal and external scientists/managers.

b. Ecosystem Management - The Ecosystem-Based Fishery Management Report to Congress was the next topic raised. The Science Board agreed that the research agenda outlined in the Report should continue to form the basis for budget initiatives so that NOAA Fisheries has the resources needed to proceed to collect the necessary data for analysis to develop the desired multi-species and ecosystem approaches to fisheries management. Examples of ecosystem approach were cited including guidelines contained in draft legislation as well as international interest in ecosystem approaches to fisheries as the topic of meetings that will be held this year. The next steps will require further coordination between the science and management sides of the Agency.

c. Status of Stocks Report - The Science Board agreed on the need for better field coordination of inputs on both this report and the annual Our Living Ocean report. The data gathering process as well as the final review for both reports should require sign-off by both Regional and Science Center leadership.

ACTION: The Office Of Sustainable Fisheries (D.Surdi) will be responsible for including in the next Status of Stocks tasking memorandum to be sent to the field, the requirement that all data submissions must be co-signed by both Regional and Science Directors. This will be the mechanism for ensuring that this coordination will be ensured in the future.

d. Excess Fishing Capacity Measures - The Science Board discussed the upcoming workshop that will review the fishing capacity evaluation methodology scheduled for April and agreed that the next data request for quantitative data should await the outcome of the Workshop. The Fishery Management Council Chairmen's meeting in May will also include this item and topics for discussion include possibly revisiting the goals for reducing fishing capacity.

e. Highly Migratory Species (HMS) Science Support and Role of National Seafood Inspection Laboratory - C.Pautzke raised the issue of the science and research support for Highly Migratory Species as an area in need of attention by the Science Board. With changes anticipated within the National Seafood Inspection Laboratory and shifting responsibilities within the HMS program, a process is needed to address the needs and resources available to develop and implement the long-term and ad hoc research program for HMS.

f. NEPA Compliance/ESA/Magnuson-Stevens Interactions - C.Pautzke reported on the many activities underway and anticipated to address problems that have been identified with NEPA compliance. There is an \$8million line item in FY01 budget to address NEPA compliance.

ACTION: The Science Board recommended that one of the areas of priority was the

development of training for Science Center staff involved on NEPA/ESA/Magnuson Stevens requirements.

g. MAFAC - Recommendations from the Marine Fisheries Advisory Committee will be the subject of the next MAFAC meeting in April.

h. Essential Fish Habitat/Marine Protected Areas - Work under EFH is focusing on defining smaller areas as “areas of particular concern”.

I. Cooperative Research - Cooperative research efforts were discussed and the need for such research to allow for collaboration between NOAA Fisheries scientists and stakeholders was highlighted. This means that some support for NOAA Fisheries participation is needed and it was noted that this year’s money allows for this at a reasonable level. Cooperative research has to be done in a scientifically valid manner in order for it to be useful for inclusion in the stock assessments. Research design needs to be developed collaboratively between industry and agency and needs to address a critical research question.

NRC Studies -Concern for support for the use of the National Academy of Sciences and NRC for future studies reviewing critical science issues was voiced by the Science Board. The question of “what is the best way for the Agency to address science infrastructure issues” was raised in light of the problems with maintaining consistent resources to conduct planned studies, as well as funding current and future years of Sea Grant Fellows.

ACTION: The SB discussed how to engage the leadership of the Agency in the above issues of support for the science infrastructure (funded largely through S&T) and the Science Board agreed to invite the OMI Director for a special session on these high priority issues to the next meeting in Santa Cruz.

Budget Review - The status of the FY02 budget was reviewed by A.Risenhoover who noted that NOAA did well in the passback and NOAA Fisheries did very well. The highest priorities for ORF were ATB, Fish Research Assessments and Socio-economic data collection. The PAC priority was the second FRV. For the FY’03 budget formulation process, the Budget Office rather than the Strategic Planning Teams will run the process. Constituency meetings are scheduled to be held around the country for input to Agency priorities for long term planning.

American Fisheries Society - Gus Rassam, Executive Director of AFS, made a presentation to the Science Board on the current AFS programs that might be of interest to NOAA Fisheries and addressed some of the services that AFS might provide. The principal program highlighted was the Fisheries InfoBase which is a longterm program to digitize and make accessible from one source the world’s fisheries scientific literature. In the first phase of this program, the AFS will be concentrating on peer-reviewed journals, magazines and books that AFS has published for years. Also envisioned is adding other components to Fisheries InfoBase such as references and links to material published by other publishers: literature published by government agencies (so-called “gray literature”); Canadian publications; symposia proceedings; and public outreach literature.

To enhance the value of such an information source, AFS feels that it is essential that publications such as Fishery Bulletin, Fisheries Statistics, and Marine Fisheries Review are included in the Fisheries InfoBase, to provide scientists and managers the most complete fisheries information resource possible.

AFS proposed to the Science Board that publication of these above listed NMFS journals might be taken over by AFS to facilitate incorporation into the Fisheries InfoBase and to ensure the continued publication of these journals in the face of political and economic uncertainty. The example of the North American Journal of Aquaculture (formerly called The Progressive Fish-Culturist) formerly published by U.S. Fish and Wildlife Service and now published by AFS was cited as proof that the move can be accomplished with no ill effects to the users. It was explained that the journal has achieved continued growth and wider distribution since it move to AFS.

Different options for the financial handling of the publication of the NMFS journals were reviewed by Mr. Rassam and the Science Board agreed to take the matter under consideration. Other services that AFS described included review services whereby AFS has undertaken the task of developing a data base of experts for peer reviews utilizing the vast expertise reservoir available from within AFS membership. AFS indicated that they would be interested in working with NMFS on its planned science and science center reviews. The last services offered in materials provided were meeting and publication services whereby AFS could contract to manage special stand-alone symposia, publish the proceedings, and provide the steering committee structure. For years, AFS has performed these services for EPA for their periodic meetings on human health issues.

ACTION: The Science Board agreed to consider this proposal and respond to G.Rassam, AFS.

Sea Grant Updates:

1. Joint Graduate Fellowship Program in Population Dynamics and Marine Resource Economics

The Federal Register notice inviting proposals for the second round of the NMFS / Sea Grant Joint Graduate Fellowship Program in Population Dynamics and Marine Resource Economics was published 28 November 2000 [<http://www.mdsg.umd.edu/NSGO/research/rfp/sgrfp01a.pdf>].

A review panel will meet in March to evaluate and rank the applicants, and selections will be made by about 1 April. In the selection process, priority will be given to selecting and placing fellows in Science Centers which do not have fellows chosen in the first round.

The intent of the Joint Program is to award two additional fellowships in each discipline in each subsequent year up to a maximum of six students per discipline at any given time. NMFS funds are available to cover the cost of the second and third years of the first four fellowships selected last year and for at least four new fellowships to be awarded this year. Whether such funds will come from the Office of Science and Technology or the participating Science Centers apparently remains to be fully resolved.

2. Sea Grant / American Fisheries Society Fellowship in "Climate and Fisheries"

This 18-month collaborative effort involving the American Fisheries Society (AFS), NMFS, the

National Sea Grant Office (NSGO), and a number of other government agencies and professional societies is well underway in planning a two-day special symposium on "Fisheries in a Changing Climate" [http://www.fisheries.org/climate/climate_symposium.htm]. It will be a highlight event at the AFS Annual Meeting to be held 19-23 August 2001 in Phoenix, AZ. The symposium agenda will include topics such as the short- and long-term effects of climate on fisheries, climate model forecasts and assessments, evidence of climate change in aquatic systems, and the consequences and adaptations of fisheries to climate change. The slate of speakers (all invited) to be finalized by the steering committee on 29 January will include prominent government (including NMFS) and academic researchers. Contributed papers will also be accepted, but presented during a separate session apart from the symposium because of the limited number of time slots available during the symposium proper.

3. Sea Grant National Strategic Initiative on Fisheries Habitat

This funding competition, which was run from fall 1999 to spring 2000, resulted in eight projects being selected for support over a two-year period (\$1,349,018 in first year, \$1,296,954 in second year, and \$2,645,972 in total). The mandatory 50% match by state Sea Grant programs of all National Sea Grant Office (NSGO) funds allocated to them translates into an overall total of nearly \$4 million of Sea Grant funds brought to bear on important research critical to the essential fish habitat (EFH) needs of NMFS.

If funds are available and the priority for this topic of research remains at a high level within Sea Grant, it is quite likely that a similar competition will be announced in the fall of 2001. As was the case for the first competition, NMFS research priorities will be incorporated into the RFP.

4. Sea Grant Fisheries Theme Team

The Sea Grant Fisheries Theme Team has prepared a two-page flyer [http://www.seagrants.wisc.edu/communications/national/theme_teams/one-pager_links.html], which has been included in the Sea Grant portfolio submitted to the Bush administration transition team. In addition, the Fisheries Theme Team has prepared a draft booklet which provides greater details on the issues and recommended research needs identified in the two-pager. The problem areas identified in the flyer and draft booklet are of high priority to NMFS and are opportunities for collaboration between NMFS and Sea Grant.

5. Long Island Sound Lobster Disaster Research

The multi-agency collaboration to investigate the factors responsible for the recent mass mortality of lobsters in Western Long Island Sound as well as a serious shell disease affecting lobsters as far east as Cape Cod is well underway. This effort involves the Northeast Fisheries Science Center (NEFSC), the National Sea Grant Office, the Connecticut and New York Sea Grant programs, the New York Department of Environmental Conservation, the Connecticut Department of Environmental Protection, the US Environmental Protection Agency Long Island Sound Office, and the Atlantic States Marine Fisheries Commission. A steering committee consisting of one representative from each of the seven participating agencies/programs plus two industry representatives has been established under the auspices of the ASMFC Lobster Management Board to provide oversight for the collaborative effort.

A spending plan for use of the \$6.6 million in emergency funds appropriated by Congress in late June 2000 for research was approved by Congress in early November 2000. An additional \$1,000,000 has been added to the competitive research pool from the State of Connecticut's Long Island Sound Research Fund.

A joint solicitation/RFP for research to be funded from the pool of \$3.5 million established for that purpose was developed and approved by the steering committee and issued in late September. A total of about 50 preproposals totaling nearly \$10 million in requested funds were received and the steering committee will meet 21 February to review the panel results. It is anticipated that funding will be made available to the successful projects by late April.

6. Symposium on "Effects of Fishing Activities on Benthic Habitats"

NOAA (NMFS Office of Habitat Conservation, Sea Grant, and NOS) and USGS are planning to sponsor a symposium on "Effects of Fishing Activities on Benthic Habitats" with participation from regional fishery management councils, states, academia, interstate and international commissions, Canadian agencies, and other governmental and non-governmental organizations. The symposium, currently in the early planning stages, is expected to be held during a three-day period in late February 2002 at a venue yet to be determined. The purpose of the symposium will be to review current knowledge on the effects of fishing activities on benthic habitats, identify information gaps, and evaluate management options for mitigating adverse effects in order to improve the ability of NMFS, the councils, and other regulatory bodies to evaluate and appropriately manage adverse effects of fishing activities on habitat for the purpose of sustaining fisheries and healthy ecosystems. Details such as specific session topics and format for publishing proceedings remain to be worked out.

7. Multi-Agency Research Program on Steller Sea Lions

OAR (including Sea Grant) is collaborating with NMFS and a number of other agencies and organizations in planning and conducting a comprehensive and coordinated research program on Steller sea lions. This collaborative effort is in response to the December 2000 FY 2001 appropriations bill which identified a total of \$43.2 million in the NOAA budget for implementing Steller sea lion research and recovery measures. Recipients of funding (endowed parties) identified in the legislation include NMFS, OAR, NOS, North Pacific Fishery Management Council, State of Alaska, University of Alaska, Alaska Sea Life Center, and the North Pacific Universities Marine Mammal Research Consortium.

A planning meeting attended by representatives of all the endowed parties was held 24-25 January in Seattle for the purpose of laying the groundwork for a collaborative research program. The meeting was originally called by the Alaska Fisheries Science Center (AFSC), but the final agenda was jointly agreed following consultations between AFSC, OAR, and Sea Grant staff. The intent of the meeting was to set a tone for collaboration, identify a process or pathway for developing a scientific plan of action, and put in place a mechanism for implementation. Complete details of a science plan were not expected to be fully developed at the 24-25 January meeting, but will be generated soon thereafter in subsequent meetings of endowed party representatives.

Science Quality Assurance Program continued:

1 . NSAW

The next National Stock Assessment Workshop will be held in Santa Cruz, CA. P.Mace reported that efforts are underway to try to schedule the workshop as early as June if logistics can be worked out, if not the more likely time-frame of November/December will be the alternative. The list of possible topics for the NSAW is extensive but the consensus of those involved in planning is that the focus should be more on a workshop format and less on presentation of papers. The workshop planning committee is expected to be senior scientists and nominations or reconfirmations of past participants are requested from the Science Centers.

2. CITES

P.Mace reported on the criteria guidelines set forth by CITES in 1994 and noted that a review of how well the guidelines are working will be the subject of meeting in Washington, DC in February. The COP #12 will be held in December 2002. A workshop of NMFS and DOI scientists may be held in May to work on these listing criteria guidelines. The outcome of that CITES workshop will be reported at the next Science Board meeting.

Advanced Technology Working Group -

L.Clarke(F/ST), in B.Karp's absence, reported on the Advanced Technology Working Groups report and noted that the next meeting of the Working Group will be in April. The report noted that the terms of reference were reviewed and that at the next meeting a matrix of capabilities and research needs will be presented. The Steering Committee consists of one representative from Headquarters, and from each of the Centers, but that the number of participants will vary with the topic to be addressed. It is the expectation of the group that their charge is to look broadly at the context of resource use of advanced technology applications.

Excess Capacity Assessment Update -

J.Ward (F/ST) reported on the planned workshop of experts to review the methodology used for qualitative assessment of fishing capacity to be held in April. Although some quantitative data is already being submitted for the second report, the plan is to not move forward with more data calls until after the Experts Workshop on the methodology.

J.Ward also reported that the Regulatory Flexibility Act guidelines are finally out and workshops are being planned as follow-up.

Strategic Research Plan Update -

M.Chandler (F?ST) is reviewing the submissions received from all Centers and selecting the best example to be used as a template for standardizing all Centers' submissions. Once the example is selected, the request to the field will be to reformat or modify their submissions and a draft revised Strategic Research Plan will be published for public comment.

Kammer Report Update -

The Kammer Report and draft Implementation Plan were reported to be under review. Following a Leadership Council discussion, a redraft of the Implementation Plan was being

undertaken by staff in the Southeast. Appendix H will also be reviewed by the Leadership Council. It was not known when the Report and Plan would be released.
